

#### **Nutrient Management in VACS**

-Focus: Practices with NMP Requirements-



Agricultural Incentives Program Manager



### **Objectives**

- Intro to VACS
- The NMP as a "Gateway Practice"
- Role within WIP III
- Key VACS Practices with NMP Requirements
- Tax Credits



Credit: agfax.com



### Purpose of the VACS Program

- Funded by the taxpayers of Virginia for BMPs
- Provides up to \$150,000 per participant/year
- Goal is to maximize nutrient and sediment reductions while implementing the most costeffective BMPs that are appropriate.
- The program is implemented on a field by field basis.
- "Least cost, technically feasible"



### **Eligibility for VACS**

- Land used in a bona fide program of agricultural management and engaged in production of agricultural, horticultural or forest products for market;
- Minimum of 5 acres (contiguous);
- Must be verifiable gross receipts in excess of \$1,000
  per year from the production or sale of agricultural,
  horticultural or forest products produced on the
  applicant's agricultural land for each of the past 3
  years.



### **Nutrient Management Plans**

- Fully implemented NMPs are the key or gateway to over 30 VACS cost-share and tax credit practices
- Can be written by a DCR NM Specialist or a private, certified NM Planner
- Can be funded through the NM-1A VACS practice or the DCR Direct Pay Program or privately by the farmer



### **Nutrient Management Plans**

- Required for the following practices:
  - All No-Till or Minimal Tillage Systems
  - All "NM" Nutrient Management practices
  - All Cover Crop Practices





### **Nutrient Management Plans**

- Required for the following practices:
  - All Animal Waste Practices
  - Both Resource Management Plan practices
  - Long Term Vegetative Cover (SL-1)
  - Stripcropping (SL-3, SL-3B)
  - Terrace Systems (SL-4)
  - Grass Filter Strips (WQ-1)





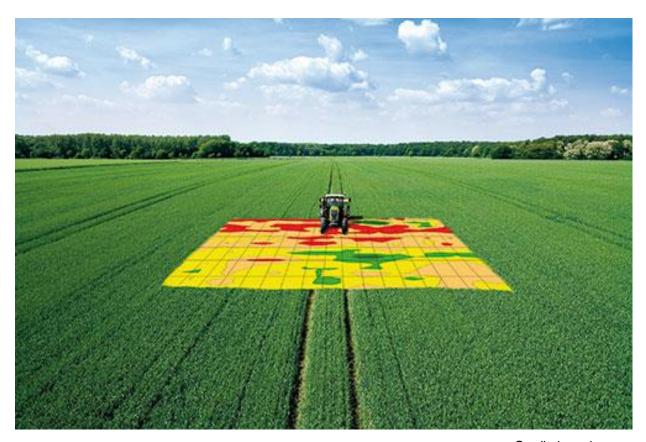
### WIP III "Bay Bill" Impacts

- Nutrient management planning is a huge part of the Commonwealth's WIP III goals
- Goal of 85% coverage on all cropland acres in the Chesapeake Bay watershed
- Per the Bay Bill, if WIP III goal isn't met, NMPs shall be required by law for all operators of 50+ CB crop acres





### Intro to Key Nutrient Management Options in VACS



Credit: ingenia.org



### **Key Nitrogen Application Options**

- NM-3C Sidedress Application of Nitrogen on Corn
- NM-4 Late Winter Split Application of Nitrogen on Small Grains
- NM-5N Precision Nutrient Management on Cropland – Nitrogen Application



### Other Key NM Practices

- NM-5P Precision Nutrient Management on Cropland – Phosphorus Application
- NM-6 Manure Injection
- NM-7 Cover Crop for Managing Liquid or Semi-Solid Manure



Credit: farmtek.wordpress.com



### Intro to Key VACS Cover Crops Options



Credit: agronomator.wordpress.com



### **Key VACS Cover Crop Options**

- SL-8B Small Grain and Mixed Cover Crop for Nutrient Management and Residue Management (i.e. the "go to" option)
- WQ-4 Legume Based Cover Crop
- SL-8H Harvestable Cover Crop
- SL-8 Protective Cover for Specialty Crops
- SL-8A Protective Cover for Agricultural Cropland (i.e. the "catch all" CC option)



### **Key CC Practice Commonalities**

- SL-8, SL-8B, SL-8H and WQ-4 are all commonly used to establish vegetative cover on cropland to reduce erosion and loss of nutrients
- Annual practices; can sign up every year
- Participants can elect for cost-share or tax credit, but not both
- Most seed types, rates and planting dates prescribed
- NMP Required
- No nutrients allowed at planting!
- Require multiple field checks (cover check & end of season)



#### **Other Key VACS Practices**



Credit: no-tillfarmer.com



### Other Key Agronomic VACS Practices

- SL-1 Long Term Vegetative Cover on Cropland
- SL-11 Permanent Vegetative Cover on Critical Areas
- WP-3 Sod Waterway



#### **WP-3**

### versus

#### **SL-11**



# The Difference? Concentrated flow is causing the erosion for the potential grassed waterway.





### **PY21 Expansion of WP-4 Options**

- In PY21, DCR expanded the WP-4 Animal Waste Control Facilities to the following:
  - WP-4LC -> For livestock in confinement
  - WP-4LL -> For non-bovine loafing lot systems
  - WP-4FP -> For feeding pads
  - WP-4SF -> For seasonal feeding facilities
- Also, WP-4B for Dairy Loafing Lot Management Systems



### **Examples: Bedded Pack**







## **Examples: Litter Shed** and Composter (WP-4C)









### **Examples: Manure Lagoon**





### **Examples: Dairies**







### **Examples: Dairy Bedded Pack**





### **Agricultural Tax Credit Program**

- Includes many standalone "tax credit only" practices
- Also can be coupled with many VACS cost-share practices for tax credit on the "out of pocket" portion of the participant's expenses.
- Offers a Virginia state tax credit of 25% up to \$25,000 expended by a participant for agricultural BMPs.
- New 50% tax credit up to \$50,000 for BMPs on agricultural lands covered by an approved RMP in implementation stage or beyond.
- No taxpayer may receive more than \$75,000 in credit.



### **Equipment Tax Credit Program**

- Offers a Virginia state tax credit equal to 25% of all expenditures for no-till or precision ag equipment as outlined in the VACS Manual.
- Capped at \$17,500 per individual/entity.



Credit: news.psu.edu



### **QUESTIONS?**



Credit: Tri-County/City SWCD